

CLAIMS

1. A bacterial strain, characterized in that it has a DNA sequence, at least part of which is capable of hybridizing with genomic or plasmid DNA of the strain deposited on December 5, 2002, under the No. I-2962, with the Collection Nationale de Cultures de Microorganismes (C.N.C.M.) [French national collection of microorganism cultures].

2. The bacterial strain as claimed in claim 1, characterized in that at least 70% of its genome is capable of hybridizing with the DNA of the deposited strain.

3. The bacterial strain as claimed in claim 1 or 2, characterized by the sequence SEQ ID No. 1 of the 16S rRNA:

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CGGTGCCTAATACATGCAAGTCGAGCGCAGGAAGCCGTCTGAACCCTTCGGGGGGACGACGGTGGAATGA
GCGGCGGACG
GGTGAGTAACACGTAAAGAACCTGCCCATAGGTCTGGGATAACACAGAGAAATCGGGGGCTAATACCGGAT
GTGTCATCGG
ACCGCATGGTCCGCTGATGAAAGGCGCTCCGGCGTCGCCCATGGATGGCTTTGCGGTGCATTAGCTAGTT
GGTGGGGTAA
CGGCCCCACCAAGGCGACGATGCATAGCCGACCTGAGAGGGTGATCGGCCACACTGGGACTGAGACACGGC
CCAGACTCCT
ACGGGAGGCGAGCAGTAGGGAATCTTCCACAATGGACGAAAGTCTGATGGAGCAACGCCGCGTGAACGATG
AAGGCTTTTCG
GGTCGTAAAGTTCTGTTGTAAGGGAAGAACAAGTGCCGCGAGGCAATGGCGGCACCTTGACGGTACCTTGC
GAGAAAGCCA
CGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGAATTATTGGGCGTAA
AGCGCGCGCA
GGCGGCCTCTTAAGTCTGATGTGAAAGCCCCCGCTCAACCGGGGAGGGCCATTGGAAACTGGGAGGCTT
GAGTATAGGA
GAGAAGAGTGGAATTCCACGTGTAGCGGTGAAATGCGTAGAGATGTGGAGGAACACCAGTGGCGAAGGCG
ACTCTTTGGC
CTATAACTGACGCTGAGGCTGCGAAAGCGTGCGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCG
TAAACGATGA
GTGCTAGGTGTTGGAGGGTTTCCGCCCTTCAGTGCTGAAGCTAACGCATTAAGCACTCCGCCTGGGGAGT
ACGGTCGCAA
GGCTGAAACTCAAAGGAATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTAATTGGAAGCAACG
CGAAGAACCT
TACCAACTCTTGACATCCCCCTGACCGGTACAGAGATGTACCTTCCCCTTCGGGGGCGAGGGGTGACAGGT
GGTGCATGGT
TGTCGTGAGCTCGTGCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTGTCCTTAGTTGCC
AGCATTAGT
TGGGCACTCTAGGGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCC
TTATGAGTTG
GGCTACACAGTGTCTACAATGGACGGTACAAAGGGCAGCGAAGCCGCGAGGTGGAGCCAATCCCAGAAAG
CCGTTCTCAG
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TTCGGATTGCAGGCTGCAACTCGCCTGCATGAAGTCGGAATCGCTAGTAATCGCAGGTCAGCATACTGCC
GTGAATACGT
TCCCGGGTCTTGTACACACCGCCCGTCACACCACGAGAGTTTGCAACACCCGAAGTCGGTGAGGTAACCG
TAAGGAGCCA
GCCGCCGAAGGTGGGGCAGATGATTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGA

or a sequence having more than 97% similarity with
SEQ ID No. 1.

- 5 4. The bacterial strain as claimed in any one of
claims 1 to 3, characterized in that it is thermo-
resistant, saccharolytic and amylolytic and/or capable
of producing L(+) lactate.
- 10 5. The strain as claimed in any one of claims 1 to 4,
characterized by growth properties at temperatures of
the order of 40 to 50°C, at a pH of 5.4 to 9.15, with
an optimum for growth at 45°C, at a pH of approximately
7.
- 15 6. The bacterial strain as claimed in any one of
claims 1 to 5, characterized by a guanine plus cytosine
content in its DNA of approximately 50 mol%.
- 20 7. The bacterial strain deposited with the C.N.C.M.
on December 5, 2002, under the number I-2962.
8. A method for culturing the bacterial strain as
claimed in any one of claims 1 to 7, characterized in
25 that the process is carried out under facultative
anaerobic conditions, at a pH of approximately 5.4 to
9.15, at 37°C, in particular of 6.5 to 7.5, in a basic
medium containing a sugar that can be used as an energy
source by this strain.
- 30 9. The use of the bacterial strain as claimed in one
of claims 1 to 7, in food fermentation processes.
10. A method for producing metabolites such as
35 L(+) lactate, characterized in that it comprises:
- culturing a bacterial strain as claimed in any one

of claims 1 to 7, under conditions suitable for its development and for the production of the desired metabolite,

- recovering the metabolites produced, isolating the
5 desired metabolite and purifying it.